# UTILITY PATENT APPLICATION UNDER 37 CFR 1.53(b)



HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS Washington D.C. 20231

Case Docket No. 4495-001

Sir:

Transmitted herewith for filing is the patent application of

INVENTOR: Shigeo Ozawa FOR: AN ACCOMMODATION BAG

### Enclosed are:

- 9 pages of specification, claims, abstract
- Declaration & Power of Attorney.

- [X] Priority Claimed
  [] Certified copy of
  [X] 1 sheets of formal drawing.
- An assignment of the invention to Office Ozawa Co., Ltd. [x] and the assignment recordation fee.
- Return Receipt Postcard [X]
- A verified statement to establish small entity status under 37 [x] CFR 1.9 and 37 CFR 1.27.

(3) NO.

- Information Disclosure Statement, Form PTO-1449
- Copies of IDS citations
- [x] Preliminary Amendment

The filing fee has been calculated as shown below:

(2) NO.

(1) FOR	FILED		EXTRA	(4) RATE	(5)	AMOUNT
TOTAL CLAIMS	9	-20	0	x \$ 9.00	=	\$0.00
INDEPENDENT CLAIMS	1	-3	0	x \$39.00	=	0.00
MULTIPLE DEPENDENT CLAIM(S) (If applications)	able)			+ \$130.00	=	00.00
			BASIC	FEE	\$	380.00
	Total of	above	calcula	ations=	\$	380.00
[x] Assignment & Rec	cording Fee	e				\$40.00
			TOTAL	FEE	\$	420.00

Attached is a check in the amount of \$ 420.00. A duplicate [X] copy of this sheet is enclosed.

The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy is enclosed.

- [X] Any additional filing fees required under 37 CFR 1.16.
- [X] The Commissioner is hereby authorized to charge payment of following fees during the pendency of this application or credit any overpayment to Deposit Account No. 07-1337. A duplicate copy of this sheet is enclosed.
  - [X] Any patent application processing fees under 37 CFR 1.17.
  - [X] Any filing fees under 37 CFR 1.16 for presentation of extra claims.

LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP

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Date: March 6, 2000

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Shigeo Ozawa

Serial No.

Filed: March 2, 2000

For: AN ACCOMMODATION BAG

# TRANSMITTAL OF VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

Transmitted herewith for filing in the above-referenced application is the following:

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS -

SMALL BUSINESS CONCERN

Respectfully submitted,

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Kenneth M. Berner

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Date: March 6, 2000

	Patentee: Shigeo Ont No.:	ZAWA	Attorney's Docket No.: 4495-	
Filed or Issued	i:			
	commodation Bag			
		ATEMENT (DECLARATION) CLA ) CFR 1.9(1) and 1.27(c)) - SMALL 1		
I hereby decla	re that I am			
<u> </u>		all business concern identified below:		
ß	an official of the sm identified below:	all business concern empowered to act	on behalf of the concern	
		FFICE OZAWA Co., Ltd.	200000000000000000000000000000000000000	
ADDRESS OF	· ORGANIZATION:	-9, Mita 2-chome, Minato-1	ai, Tokyo 108-00/3 JAPAN	
and reproduced the number of (I) the number on a full-time, when either, d the power to of I hereby declar	d in 37 CFR 1.9(d), for employees of the concert of employees of the tor- part-time or temporary lirectly or indirectly, one control both.	purposes of paying reduced fees under sern, including those of its affiliates, doustiness concern is the average over the basis during each of the pay periods of e concern controls or has the power to act or law have been conveyed to and re-	s a small business concern as defined in 13 CFR exciton 41(a) and (b) or Title 35, United States Coc as not exceed 500 persons. For purposes of this previous fiscal year of the concern of the persons the fiscal year, and (2) concerns are affiliates of e- control the other, or all third party or parties control are all business concern identified at	ie, in the statement employ- ach oth ols or he
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described in	by	inventor(s) Shigeo OZAWA		
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an independen business conce	t inventor under 37 CFI en under 37 CFR 1.9(d)	R 1.9(c) if that person made the invent or a nonprofit organization under 37 CF.	y person, other than the inventor, who could not c ion, or by any concern which would not qualify a R 1.9(e). *NOTE: Separate verified statements are on averring to their status as small entities. (37 C	s a sma require
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NAME OF PE	ERSON SIGNING:	Shigeo OZAWA		
		CERTIFIE OF AND CO. LEG		
TITTE IN OR	GANIZATION:	OFFICE OZAWA Co., Ltd.		
TITLE IN OR ADDRESS OF	F PERSON_SIGNING:	c/o OFFICE OZAWA Co., Ltd	1. 7-9, Mita 2-chome, Minato-ku	Tokyo
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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Shigeo Ozawa

Serial No. : Group Art Unit:

Filed: Herewith : Examiner:

For: AN ACCOMMODATION BAG

#### AMENDMENT

Honorable Commissioner of Patents and Trademarks Washington, D. C. 20231

Sir:

Prior to examination of the above-identified application, please amend the application as follows.

### IN THE CLAIMS

Please amend the claims as follows:

- (Amended) An accommodation bag described in claim 1 [or
   wherein the outer bag is equipped with a vapor releasing hole.
- 4. (Amended) An accommodation bag described in [either of] claim 1 [to claim 3], wherein a boiled water releasing hole is equipped on the bottom face of the outer bag.
  - 5. (Amended) An accommodation bag described in [either of]

claim 1 [to claim 4], wherein the accommodation bags are capable of passing the boiled water through.

- 6. (Amended) An accommodation bag described in [either of claims to 1 to 5] claim 1, wherein at least one of the bags accommodates a liquid and a heating means for heating the liquid thereof.
- 7. (Amended) An accommodation bag described in [either of] claim 1 [to claim 6], wherein the vapor releasing hole is sealed by a member being equipped with a vapor blow out time adjusting function.
- 8. (Amended) An accommodation bag decried in [claims 1 to 7] claim 1, wherein the vapor releasing hole is formed integrally with an expansion free display means for displaying an inside pressure of the outer bag, depending on the degree of expansion.
- 9. (Amended) An accommodation bag described in claim 1 [to claim 8], wherein the heating means is installed in a sealed container being sheltered from the inside of the accommodation bag in a manner that at least two kinds of materials, which generate a heat by chemical reaction, are separately stored so as to be mixed by an outer pressure.

### REMARKS

Claim 3-9 have been amended to eliminate the multiple dependency thereof.

Entry of this Preliminary Amendment is respectfully requested and deemed in order.

Respectfully submitted,

LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP

Kenneth M. Berner

Registration No. 37,093

1700 Diagonal Road, Suite 310 Alexandria, Virginia 22314 (703) 684-1111 KMB:jad Date: March 6, 2000

Facsimile: 703-518-5499

# TITLE OF THE INVENTION: AN ACCOMMODATION BAG

# BACKGROUND OF THE INVENTION

# 1. FIELD OF THE INVENTION

This invention relates to an accommodation bag wherein mixing of plural number of liquids to be processed (heating or mixing), or of the aforementioned liquids and goods is made possible in one external package by heating with the usage of an outer pressure or a microwave oven and the like, and an accommodation bag equipped with a heat generation means for generating a heat generation chemical reaction in an independent bag in the liquid accommodation bag without being mixed with the liquids, and making it possible for using only the heat thus generated.

## 2 DESCRIPTION OF THE PRIOR ART

Conventionally, when a liquid or the plural number of goods are planned to be used by heating or mixing, it required a labour and a time for preparation of a heating apparatus as they are stored in separate containers and the like respectively. There has been no apparatus having such a structure as to carry out these operations in one outer package easily. As to the foods, for saving a cooking time and a labour, the frozen foods or processed foods, which are cooked foods being frozen in a pack, are used as easily preparable ones for edible condition. As to such a beverage as tea or coffee, it requires water and heating, and generally takes a time/labour for preparation. Nothing is existed so far for which becomes drinkable by applying the heat only.

#### SUMMARY OF THE INVENTION

#### 1 PROBLEMS TO BE RESOLVED BY THE INVENTION

When the plural kinds of liquids of different quality are mixed or mixed with other goods, there has been a problem that the quality is rapidly deteriorated. In the case of the foods, the taste is lost and a validity period is shortened as well. The frozen foods have a problem that it takes time and labour for thawing and the taste becomes deteriorated. As to the processed foods, since it is preseasoned, the taste is lowered if it elapses a long time. There are some which become edible just by heating with a microwave oven, but a variety is limited and seasoning is also limited to a simple one.

#### 2 MEANS OF SOLVING THE PROBLEM

For making it possible to easily carry out heating or mixing of plural goods in one bag, this invention has a basic structure wherein the plural number of accommodation bags are installed in one outer bag in a manner that at least one of which is a liquid accommodation bag, having a heating means in it when necessary. Namely, it is constituted with a heat resistance outer bag having a vapor releasing hole on a top face, which is to be formed in accordance with an inside pressure of the accommodation bag, and a heat resistance liquid accommodation bag being installed in the outer bag accommodating the foods accommodation bag and the liquid. When the accommodation bag is heated by a microwave oven and the like, the liquid in the liquid accommodation bag flows out by a pressure inside the bag so as to make it possible for immersing and heating the foods in the foods accommodation bag, which allows a passage of the liquid. Also, in a case

that the number of liquid accommodation bag is plural, the mixture of the plural liquids is carried out in one outer bag.

The accommodation bag is also constituted with a heat resistance outer bag having a vapor releasing hole on the upper face and a hot water releasing hole formed on the bottom face, a heat resistance liquid/foods accommodation bag which accommodates the liquid/foods and allows the passage of the hot water is installed in the outer bag, and a heat resistance liquid accommodation bag which accommodates the liquid and is installed in the outer bag piled over the liquid/foods accommodation bag, wherein the liquid in the liquid accommodation bag is made to boil and the boiled water flows out over the liquid/foods accommodation bag when the outer bag is heated by the microwave oven and the like. Also, the vapor releasing hole. the hot water releasing hole and a means provided with the liquid accommodation bag for making the liquid flow out possible are holes to be formed respectively by heating, and are covered by sealings before being heated. Stripping off timing of the seals are different depending on the holes respectively. Therefore, vapor flow up time can be set arbitrarily. depending on the difference of heating conditions, strength or material of the seal. An expansion free displaying means is mounted so as to make a vapor pressure variation inside the accommodation bag visible.

Further, as to a method for heating the outer bag, the problem is solved by installing a heating means in the liquid accommodation bag. Namely, the heating means is independently installed in the liquid accommodation bag and has a means to obtain a heat generation by mixing, when they are used, at least two kinds of materials for generating the heat by chemical reaction

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a brief cross-sectional view of the accommodation bag,

FIG. 2 is an operation explanation drawing of the accommodation bag, and

FIG. 3 is an explanatory drawing of the display bag expandedly formed accompanied by rising of an internal vapor pressure.

## DETAILED DESCRIPTION OF THE INVENTION

# 1. EMBODIMENTS OF THE INVENTION.

As shown in Fig.1, the accommodation bag comprises the outer bag 1, the liquid accommodation bag 3, the accommodation bag 7 which accommodates eating/drinking goods and the like, and the heating means 6. Each of the bag is made by adhering the two piled up sheets of synthetic resin material being superior in a heat resistance and by applying a heat sealing to its periphery. On the top face of the outer bag 1, a vapor pressure releasing hole 4 is formed, and on the bottom face of the bag 1, a hot water releasing hole 5 is formed and they are covered by seals. Since an inner part of the outer bag 1 becomes a high pressure, the reinforcement seals are pasted to an outside of the top face, and an inside of the bottom face so that the holes are not torn out. A vapor pressure discharge adjusting packing seal is pasted to an inside of the upper face. The vapor pressure discharge adjusting packing seal is formed with a foaming polyester, flocked polyurethane foam and the like, which are durable for water and superior in

gas permeability and elasticity having a width of 2mm to 5mm degree.

The liquid accommodation bag 3 is also made of two similar synthetic resin material sheets by being piled over similarly to that of the outer bag 1. whose periphery is heat sealed and formed in a bag shape, in which a fluid is accommodated. The liquid in the liquid accommodation bag 3 outflows from the bag 3 when it is heated, but an outflow temperature of the liquid can be adjusted by a position of the hole. In the figure, the liquid flow-out hole position is formed on the top so as to flow out as a vapor, the hole may be formed at the bottom. In this case, a vapor pressure inside the liquid accommodation bag 3 should be closed so that it is opened at a higher vapor pressure than the one when the hole is formed at the top. The fig.2 is describes a status where the liquid is flowed out from the bag 3, and the fig.3 describes a status where the vapor releasing hole 4 is formed on the expansion free member, which becoming visible by expansion of the vapor pressure inside the accommodation bag. Both of figures are describing where the heating means 6 is installed in the bag 3 but, when heating is carried out by the microwave oven, the heating means 6 is not required to be installed in an accommodation bag 7. A heating time display 8 in the fig.3 is displaying a vapor blow up time. It can be useful for preventing a danger.

In the eating/drinking goods accommodation bag 7, a favorite beverage such as a black tea, Japanese tea, colong tea and the like may be accommodated. The bag is made by overlaying two sheets of capillitium net or a non-woven cloth formed with a synthetic resin material. The sheet is superior in heat resistance and cold resistance property. The periphery of the sheet is also adhered in degree of 5mm or 10mm width. The bag 7 is

also acting as a filtering bag. When the ground coffee beans are accommodated, the bag is used as an eating/drinking goods accommodation bag 7 in a condition that the ground beans are clamped with a filtering paper from the above and the bottom. At the bottom of the eating/drinking goods accommodation bag 7, one or several or crossing synthetic resin material fiber thread of 0.5mm degree or a net is provided so as to rapidly and smoothly passes hot water of the black tea or coffee, and carry out a pressure adjusting function smoothly in the eating/drinking goods accommodation bag 7. The eating/drinking goods accommodation bag 7 is pasted to a bottom inner side of the outer bag 1 with heat sealing.

With reference to the heating device 6 installed inside the liquid, it is considered to be a double constitution for utilizing a chemical reaction, wherein an oleaginous oil is used on one part and a compound and the like composed of calcium and carbon is used on the other so that it yields a high temperature by reacting them when they are used.

#### 2. EFFECTS OF THE INVENTION

The accommodation bag of this invention enables, as described above, to provide a cooking method of entirely new, simple and capable of processing or seasoning with the usage of a heat generation apparatus such as a microwave oven. Also, the bag is so deliberated that the favorite beverage such as a coffee, tea and the like is made ready for a drinkable condition without newly preparing a water. Further, the bag enables to supply a plural of materials, without deteriorating the tastes, keeping their quality stable, since the mixture or processing can be carried out when they are

# used.

Likewise, since it provides a simple processing method wherein even a heat generation device such as the electronic oven is not required due to an internal heat generating apparatus, this invention can greatly contribute to the industry as the relief goods at the time of an emergency such as an occurrence of the earthquake and the like or an accident, or for areas where a relief is asked for.

## EXPLANATION OF CODE

- 1 Outer bag
- 2 Liquid releasing hole
- 3 Liquid accommodation bag
- 4 Vapor releasing hole
- 5 Boiled water releasing hole
- 6 Heating means
- 7 Accommodation bag
- 8 Heat time display

# What is claimed is:

- 1 An accommodation bag wherein it comprises, an outer bag and one or more accommodation bags which have independent spaces from the outer bag and are yet accommodated in the outer bag.
- An accommodation bag described in claim 1, wherein at least one of the accommodation bags is made capable of outflowing an inside liquid by heating.

- An accommodation bag described in claim 1 or 2, wherein the outer bag is equipped with a vapor releasing hole.
- An accommodation bag described in either of claim 1 to claim 3, wherein a boiled water releasing hole is equipped on the bottom face of the outer bag.
- An accommodation bag described in either of claim 1 to claim 4, wherein the accommodation bags are capable of passing the boiled water through.
- 6. An accommodation bag described in either of claims to 1 to 5, wherein at least one of the bags accommodates a liquid and a heating means for heating the liquid thereof.
- 7. An accommodation bag described in either of claim 1 to claim 6, wherein the vapor releasing hole is sealed by a member being equipped with a vapor blow out time adjusting function.
- 8. An accommodation bag described in claims 1 to 7, wherein the vapor releasing hole is formed integrally with an expansion free display means for displaying an inside pressure of the outer bag, depending on the degree of expansion.
- 9. An accommodation bag described in claim 1 to claim 8 wherein the heating means is installed in a sealed container being sheltered from the inside of the accommodation bag in a manner that at least two kinds of materials, which generate a heat by chemical reaction, are separately stored so as to be mixed by an outer pressure.

# ABSTRACT

This invention consists of an accommodation bag such that one outer bag accommodates multiple inner accommodation bags and at least one of the inner accommodation bags is a liquid-accommodation bag from which a liquid flows. Also, the liquids or goods that flow out from other multiple accommodation bags in the outer bag are processed and used by mixing with or coming into contact with each other. Therefore, it is also possible to use the processed liquid for drinking or eating by taking it via the bottom of the outer bag. As a heating means, either an outside means, such as a microwave oven or the like, or an independent container installed inside the liquid-accommodation bag, is used. The heat-generation means inside the liquid-accommodation bag is such that heat is generated when there are combined together at least two kinds of materials that generate heat by chemically reacting together, and such that only such generated heat can be utilized.

FIG. 1

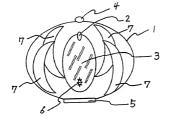


FIG. 2

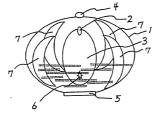
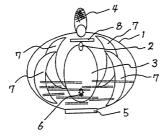


FIG. 3



# **DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that.				
My residence, post office and citizenship are as stated below	w next to my name,			
I believe I am the original, first and sole inventor (if only names are listed below) of the subject matter claimed and fan Accommodation Bag	one name is listed below) or an original for which a patent is sought on the inver	I, first and joint inventor (if plural tion entitled		
the specification of which				
[ ] was filed on (if applicable)	as Application Serial No	and was amended on _		
I hereby state that I have reviewed and understand the contembra any amendment referred to above.	ents of the above identified specification	, including the claims, as amended		
I acknowledge the duty to disclose information which is known of Federal Regulations, Section 1.56.	own to me to be material to patentability	in accordance with Title 37, Code		
I hereby claim foreign priority benefits under Title 35, U application(s) for patent or inventor's certificate, or Section country other than the United States, listed below and have al having a filing date before that of the application on which	n 365(a) of any PCT international application identified below any foreign application	ation which designated at least one		
Prior Foreign Application(s):	Priority Claimed			
Number Country Day/Month/Year filed	Yes No			
H11-313128 JAPAN 2/11/1999	x			
I hereby claim the benefit under 35 USC §119(e) of any U	Inited States provisional application(s) li	sted below.		
Prior Provisional Application(s): Application Number Filing Date				

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, 1 acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U. S. Application(s):

Serial No. Filing Date Status: Patented, Pending, Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) and/or agent(s): Allan M. Lowe, Reg. No. 19,641; Benjamin J. Hauptman, Reg. No. 29,310; Israel Gopstein, Reg. No. 27,333; Kenneth M. Berner, Reg. No. 37,093; Michael G. Gilman, Reg. No. 19,114; Albert J. Fasulo II, Reg. No. 43,607; and Randy Noranbrock, Reg. No. 42,940, all of

with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office

connected therewith, and all future correspondence should be addressed to them.

LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP 1700 Diagonal Road, Suite 310 Alexandria, Virginia 22314

Full name of sole or first inventor: Shigeo OZAWA

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Citizenship: Japan

Post Office Address: Same as above

Full name of second joint inventor:

Inventor's signature: Date:

Residence:

Citizenship:

Full name of second joint inventor:

Inventor's signature:

Residence:

Citizenship:

Post Office Address:

Full name of third joint inventor:

Inventor's signature:

Date:

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Full name of fourth joint inventor:

Inventor's signature:

Date:

Residence:

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Full name of fourth joint inventor:

Inventor's signature:

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Post Office Address: